(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization
International Bureau

(43) International Publication Date
12 April 2001 (12.04.2001)

PCT

(10) International Publication Number
WO 01/25094 A2

(51) International Patent Classification[7]: B65D

(21) International Application Number: PCT/IB00/01406

(22) International Filing Date: 3 October 2000 (03.10.2000)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
99/6290 4 October 1999 (04.10.1999) ZA

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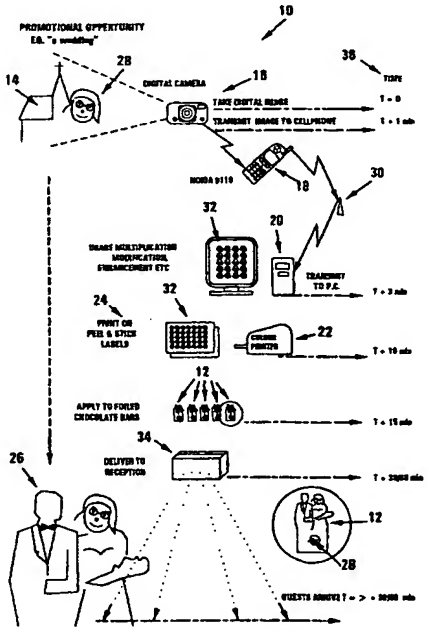
(81) Designated States *(national)*: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW.

(84) Designated States *(regional)*: ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).

Published:
— *Without international search report and to be republished upon receipt of that report.*

[Continued on next page]

(54) Title: PACKAGING



(57) Abstract: A method of customizing packaged goods with a unique image is provided. The method includes obtaining at a remote location the unique image in a digital form, communicating the image to a packaging facility, and applying the image to the goods thereby to customize the goods with the unique image. Preferably, the image is communicated in a wireless fashion to enhance the speed at which the image is communicated from the remote location to the packing facility. Typically, the method includes obtaining the image using a digital camera. Preferably, the method includes transferring the digital form of the image from the digital camera to a cellular telephone and communicating the image via a cellular communications network to the packaging facility. The invention extends to a system for customizing packaged goods with a unique image.

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For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

PACKAGING

THIS INVENTION relates to packaging. It relates in particular to a method of, and system for, customizing packaged goods.

For the purposes of this specification, goods such as fast moving consumable goods or products, e.g. chocolates or the like, should be predominantly but not exclusively borne in mind.

In accordance with the invention, there is provided a method of customizing packaged goods with a unique image, the method including

obtaining at a remote location the unique image in a digital form;

communicating the image to a packaging facility; and

applying the image to the goods thereby to customize the goods with the unique image.

Preferably, the image is communicated in a wireless fashion to enhance the speed at which the image is communicated from the remote location to the packing facility. It is however to be appreciated that the image may be communicated via a l hardwired telephone system, terrestrial or satellite devices including cable or fibre optic transmission systems and WAP (wireless application protocol) devices. As an existing communication system may be used and the unique image is captured in

a digital form, the image may be communicated at relative speed from the special event to the application facility and the image may immediately be applied to the product thereby to allow speedy delivery of the product.

Typically, the method includes obtaining the image using a digital camera.

Preferably, the method includes transferring the digital form of the image from the digital camera to a cellular telephone and communicating the image via a cellular communications network to the packaging facility.

Typically, the method includes editing the digital image prior to the application thereof to the goods. The image may be applied to a plurality of labels and thereafter applying the labels to packaged goods. However, the image may be applied to packaging for receiving goods and thereafter the goods may be packaged.

Typically, the digital image is captured at a preselected event and the goods are provided at the event prior to the termination of the event. For example, the event may be a marriage and the image captured may be that of a bride and bridegroom. The method may also be applied to a sporting event e.g. a rugby match or the like, to a prizewinner in a competition, or the like.

The method may include communicating the image to the packaging facility via the Internet. For example, the image may be communicated via a cellular telephone network to an Internet service

provider and thereafter communicated via the Internet to the packaging facility. Thus, the method may include providing an Internet web site with a graphics facility thereby to enable a user to create the image and communicate the image to the packaging facility.

Still further in accordance with the invention, there is provided a system for customizing packaged goods with a unique image, the system including

image capturing means for capturing the unique image in a digital form;

application means for applying the image to packaging for goods at a packaging facility remote from the image capturing means; and

communication means for communicating the image to the application means.

The image capturing means is typically a digital camera. It is however to be appreciated that the image capturing may also be a digital video camera, digital television camera, video recorder, digital scanner, or the like.

Preferably, the communication means is a cellular communications network and the system includes a cellular telephone which communicates the digital image from the digital camera to the packaging facility.

The application means may be operable to apply the image directly to the packaging after the goods have been packaged. Accordingly, the application means may be a printer operable to apply the

image to a label which is applied to the goods with a chemical adhesive or any other means.

The system may include a personal computer with a digital image editing package for digitally manipulating the image prior to application thereof to the goods.

The goods are typically so-called fast moving goods such as confectionery items e.g. chocolates or the like.

The invention is now described by way of example with reference to the accompanying diagrammatic drawings.

In the drawings,

Figure 1 shows a schematic representation of a system for customizing packaged goods with a unique image, in accordance with the invention;

Figure 2 shows a schematic representation of a further embodiment of the system of Figure 1;

Figures 3 to 5 show yet further embodiments, of the system in accordance with the invention, in which communication of the unique image is via the Internet; and

Figure 6 shows a schematic representation in which multiple unique images from various sources are applied to consumable products.

Referring in particular to Figure 1 of the drawings, reference numeral 10 generally indicates a system, in accordance with the invention, for customizing packaged goods 12 with a unique image 28.

The system includes image capturing means in the form of a digital camera 16, communication means in the form of a cellular telephone 18, a personal computer (PC) 20, and application means in the form of a colour printer 22. As described in more detail below, the system 10 allows the unique image 28 to be rapidly communicated to a packaging facility 24 where the unique image 28 is then applied to the packaged goods 12 which are in the form of consumable goods such as chocolates.

In use, at a particular special event such as a wedding, the digital camera 16 is used typically to take a photograph of the bride and bridegroom 26 in or at the church 14. The digital camera 16 is a digital camera (typically a Casio™ QV 2000 UX or QV 3000 camera) which is compatible with the cellular telephone 18. The digital camera 16 communicates, using standard infra red communications protocol, with the cellular telephone 18 (typically a Nokia™ 9110) which communicates the unique image 28 via a cellular telephone network 30 to the PC 20 which includes a modem compatible for the transmission of digital images from the digital camera 16. The image received by the PC 20 may then be manipulated, enhanced or the like with appropriate software and then printed in the form of peel-off labels 32 by the colour printer 22. The peel-off labels 32 are then applied to the packaged goods 12 which have already been manufactured and pre-packaged with a standard wrapper. Each chocolate then receives a label 32 which bears the unique image 28 of the bride and/or bridegroom 26 and the packaged goods 12 are thus customized with the unique image 28 and packed into a container 34 for delivery at the wedding reception. The packaged goods 12 may thus be delivered to the wedding reception in a timeous manner such that they are presented on the reception tables before the arrival of the bride and

groom and their guests. It is however to be appreciated that multiple unique images of different subjects may be captured by the digital camera 16 and applied to the packaged goods 12.

As generally indicated by reference numeral 36, the time duration from initially capturing the unique image 28 to packing the packaged goods 12 into the container 34 is typically about 30 to 60 minutes dependent upon the quantity of goods to be customized. In particular, within about one minute of capturing the unique image 28 the unique image 28 may be communicated to the cellular telephone 18 and, within about four minutes, the unique image of the bride and bridegroom 26 is downloaded from the cellular telephone 18 onto the Internet. The time taken is dependent upon the image file size. The unique image 28 is then communicated to the e-mail address of the PC 20. The time taken from completion of downloading from the cellular telephone 18 to arrival at the PC 20 is dependent on factors associated with the Internet service. Accordingly, using a cellular network 30, a unique image 28 from a remote location may be communicated relatively rapidly to the packaging facility 24. Typically, manipulation, modification, enhancement, or the like of the unique image 28 takes about seven minutes dependent upon the quantity of labels 32, quality of print required, the speed of the printer, or the like. Dependent on the quantum of packaged goods 12 to be customized, the labels 32 are typically applied to the packaged goods 12 and packed into the container 34 in about twenty-five to forty-five minutes. Upon arrival of the guests at the reception, the uniquely customized chocolates are already available. It is to be appreciated however that the packaging facility 24 may in fact be provided at the wedding reception.

Referring to Figures 2 to 5 of the drawings, reference numerals 10.1 to 10.4 generally indicate further embodiments of the system in accordance with the invention. The systems 10.1 to 10.4 resemble the system 10 of Figure 1 and, accordingly, like reference numerals have been used to indicate the same or similar features unless otherwise indicated.

Referring in particular to Figure 2 of the drawings, the system 10.1, in a similar fashion to the system 10, is used to customize packaged goods 12 which are in the form of chocolates. The system 10.1 may be used to capture a unique image 28, for example in an in-store promotional arrangement at a supermarket or the like, and communicate the unique image to the PC 20. The PC 20 is located at a manufacturing plant 38 which also includes packaging apparatus 40 which applies the unique image 28 directly to the wrappers or packages in which chocolate bars 42 from a production facility are packaged. The uniquely customized packaged goods 12 are then packed in a container 34 for delivery to the particular store where the unique image 28 was captured. It is to be appreciated however, that the system 10.1 may be used to capture unique images 28 at sporting events, the winner of a lucky draw competition or any other circumstances whether they constitute a promotional event or not. As the system 10.1 applies the unique image 28 directly to wrappers or packages prior to receiving their contents such as the chocolate bars 42, the delays in delivering the final product are greater than those in the case of the system 10. As shown at 41, the unique image 28 is printed on or applied to the wrappers or packages prior to insertion of the goods therein. Reference numeral 44

generally indicates the time delays which apply to the system 10.1 using the manufacturing plant 38.

Referring in particular to Figure 3 of the drawings, the system 10.2 uses the Internet 50 to communicate unique images 29 from a remote location 52 to a packaging facility 24. In addition to the digital camera 16, a digital video camera 54 and a scanner 56 are provided. Digital images captured by the digital camera 16, the digital video camera 54, and the scanner 56 are fed into the PC 20 which is communicated via the Internet 50 to the packaging facility 24.

The system 10.2 includes a web site generally indicated by reference numeral 58 which provides various options, e.g. chocolate bar-shape options, chocolate bar-size options, facility to transmit colour photos, selection of type of wrapper, design of own wrapper which then defines the unique image 28, designing customized logo/message, or any other special requests. The unique design including the digital image 28 is then communicated to the packaging facility 24 which includes a manufacturing facility 60, packaging apparatus 40, and distribution networks 62. The customized goods may then be supplied to the consumers.

Referring in particular to Figure 4 of the drawings, the system 10.3 resembles the system 10.1 in that it includes a manufacturing plant 38 where the unique image 28 is applied to packaging or wrappers prior to inclusion of the goods which are in the form of chocolate bars 42. However, unlike the system 10.1 which uses the cellular network 30, the system 10.3 communicates unique

packaging information from a remote location to the manufacturing plant 38 via the Internet 50.

Referring in particular to Figure 5 of the drawings, the system 10.4 substantially resembles the system 10.1 in that it includes the manufacturing plant 38 which directly applies the customized image to wrappers prior to packaging of the chocolates 42. However, unlike the system 10.1, the system 10.4 communicates the digital image via the Internet 50 and further includes a remote PC 64 which receives the digital image from the digital camera 16 and, thereafter, communicates it to the PC 20 via the Internet 50.

Referring to Figure 6 of the drawings, reference numeral 70 generally indicates a further embodiment of the system, in accordance with the invention, for customizing packaged goods 12 with unique images 28.1, 28.2, and 28.3. The system 70 includes a central hub 72 which negotiates pricing, delivery, wrapper design, or the like with various clients 74.1 to 74.5. Once the unique images 28.1 to 28.3 have been defined by the various clients 74.1 to 74.5, they are then applied to the packaged goods 12.1, 12.2 and 12.3. The unique images are applied at a manufacturing centre 76 which may also source unique images from a single store 78.

The digital camera is typically a Casio™ QV 2000 UX camera and the cellular telephone is typically a Nokia™ 9110. The digital camera is typically prepared as follows :

1. The camera must be in the off status (lens covered).

2. The photo image to be transferred is selected by pressing the "play on/off" key and then using the Menu - < and > + cursor key to choose the required image. The image is displayed on the LCD (Liquid Crystal Display) screen on the camera.

3. To put the camera in "photo transmission mode" you press the button referenced No 11 in the Casio manual. This is the silver left hand button on the top of the camera with a camera flash and transmission logo below it.

When this button is selected, the LCD shows a "SEND" message. This means that it is in a standby mode waiting for the cell-phone to connect to the camera. It is possible to cancel this by pressing the MENU button.

4. It is now preferable to position the camera on a stable surface at approximately 30cm from the Nokia 9110 cellphone with the infra red transmitters facing each other.

In order to transfer the image from the Casio camera to the Nokia 9110 cellphone the following steps are executed :

1. The cellphone does not need to be connected to a service provider at this stage.

2. Open the phone and press the "SYSTEM" application button. The application buttons are at the top of the communicator keyboard

and are of a different colour. Refer to pages 14 and 15 of the Nokia™ manual.

3. Using the < > ∧ ∨ cursor keys highlight "Digital camera connectivity" and press the Select command button.

4. Press the Image List command button.

5. Press the Receive command button. A "Ready to receive" window image will appear on the Nokia screen with an option to Cancel if required.

6. If the camera has been set to SEND then the screen on the Nokia will immediately show "receiving image" on the LCD screen.

7. The camera LCD screen will change from SENDING to "connected to Nokia Communicator".

It is possible to cancel the transfer by either:

a) Pressing the "MENU" button on the camera; or

b) The cancel command button on the Nokia display.

The time taken to transfer the image into the Nokia cellphone is normally 30-60 seconds.

The digital image is then transferred from Nokia 9110 to an e-mail address for receipt at the packaging facility as set out below.

The Nokia communicator is prepared as follows :

1. On completion of the image transfer the Nokia screen will display "IMAGE.UPF complete" and put the data file into the "Image list" display showing date and time e.g. IMAGE.UPF 18.05.00 14:13

2. It is now necessary to rename the file by selecting the "rename" key. A "rename window" will open showing the text IMAGE.UPF.

3. Delete the IMAGE text ONLY by using the < cursors and the "back arrow" delete button on the Nokia key board. DO NOT delete the .UPF.

4. Type a name for this Image file. It is suggested that the name is that of the person on the image or some other reference to the actual image. We will use the brides name for our example, i.e. "JOAN.UPF" then select the "OK" command button.

5. It is now necessary to convert this .UPF file into a JPEG file before transmission through the Internet.

6. Press the "Menu" button at the top left hand side of the Nokia display. You will see that a "Menu window" opens on the display.

7. Select the "Convert to JPEG" option.

8. A window appears that says "Converting JOAN.UPF to JOAN.JPG". This takes a few seconds and the new file name will appear on the "Image list".

9. It is recommended that the JOAN.UPF file now be deleted if it is not required. This is achieved by placing the cursor highlight over the JOAN.UPF file name and again open the "Menu window" by pressing the "Menu" button.

10. The "Menu window" now shows the following displays:

Open - This allows you to view the selected image on the Nokia display. The image is monochrome and may take approximately a minute to download.

Delete - This deletes the highlighted file.

Convert to JPEG: (or UPF depending on selected file)

Image Information - This gives you data on the image file, i.e. resolution and size.

Move the cursor to "Delete" and press the "Select command button. The Nokia provides a "confirmation to delete screen" to make sure you are sure of the delete request.

Deleting the UPF files increases your memory storage space.

11. Press the "Close" command button to get out of the "Image list" and "Close" again to get out of the "Digital camera connectivity" function.

The following steps are executed to transmit the JPEG image file to the e-mail address which is typically that of a franchisee:

1. Select the "Internet" application on the Nokia keyboard.

2. Place cursor highlight over "Mail" and press the "Select" command button.

3. With the "Own texts" highlighted press the "open" command key.

This will open the "Own Texts" function which will display any existing saved mail.

4. If you want to open a new e-mail then you select the "Write mail" command button. Alternatively you can open and existing saved mail message by highlighting the file and selecting the "Open" command button.

5. If the camera operator wants to convey a particular request to the Franchisee processing office he can use the "Write mail" function to send a text message with his image.

6. When the message is complete select the "Recipient" command button, which now displays the Mail directory as set up in the "Contracts" application.

7. The required recipient is highlighted by typing in the first letter(s) of their name in the "prompt window" and using the cursor to highlight the required recipient. Then press the "select" command button. This will normally be the Franchisee who is supplying the novelty. In terms of the total integration of all franchisees each franchisee will be designated a reference number. All franchisees will know these numbers for storage in the contact section and therefore all franchisee e-mail address. The master franchiser will update these files.

8. A "Mail envelope (O attachments)" screen will be displayed with the recipients e-mail address displayed within the envelopes To:.....

It is also possible to add in a Subject title and a copy mail (cc). At Joan's wedding the subject text could be "Joan Mather"

9. It is now necessary to add the JOAN.JPG image attachment to the e-mail by selecting the "Attachments" command button.

10. The "attachments file (OkB)"is displayed.

11. Select "Add" and the "Files" screen is now displayed which shows the following:

"Own Text"

"Downloaded Files"

"Tones"

12. Highlight the "Downloaded Files" with the cursor and press the "Open" command button.

13. The "Download Files" screen will now show the JOAN.JPG file.

14. Highlight the file using the cursor and press the "Select" command button.

15. The "Attached files" screen will now display the name of the file and it's size say 134kB.

16. Press the "Add" command button which takes you to the "files" display.

(It is now possible to attach more images by repeating this operation by returning to the "downloaded files" screen.) assuming only one image you continue;

17. Press the "Cancel" command button which returns to the "Attached Files (134kB).

18. Press the "Close" command button which returns you to the "Mail envelope (1 attachments) display. The Nokia is now ready to send the image JOAN.JPG to the selected e-mail address.

19. The Nokia may now be connected to the GSM network by switching on and inputting your private PIN number.

20. When Nokia is connected press the "Send" command button.

21. The Nokia displays in the bottom left of the screen, above the signal strength icon, that a data transfer is in progress. It takes approximately 3 minutes for a 134kB image to be transferred from the phone into the network system. The time taken to get the destination e-mail address is variable depending on traffic etc.

Note: When you open an "application" it commences at the point at which you left off.

Therefore, when you open the "" it may be necessary to return to the start point which is by opening the "Mail" option by pressing the "select" command button.

An example of the application of the invention on 10 June 2000 is set out below.

1. At 5.04pm a digital photo was taken of Andre Vos, the Springbok Rugby captain, as he ran onto the field in East London to play a match against Canada.

2. At 5.08pm a digital photo was taken of the two rugby teams lining up on the field for the National Anthems.

3. At 5.09pm the digital photos had been transferred into a Nokia 9110 cellphone.

4. At 5.19pm these digital photos had arrived, via e-mail, at a printing station at a production facility approximately 8 kilometres away.

5. The photos were printed on photographic quality circular labels, applied to Green & Gold foiled chocolate bars.

6. Before the half time whistle, three hundred chocolate bars had been delivered to the ground for distribution in the corporate boxes.

7. Before the full time whistle, almost 1500 chocolate bars had been supplied to the ground including images of Andre Vos and further goods including an image showing the team members lining up.

Training details (Refer item 4)

Transfer of digital image from Casio QV 2000 UX to Nokia 9110

In a franchising arrangement, each Franchisee will be supplied with a Casio Digital Camera as the standard camera. It is essential that the documentation supplied with the camera be read to understand the functions of the camera.

The Inventor believes that the invention, as illustrated, provides a relatively efficient and speedy system 10, 10.1, 10.2, 10.3, 10.4, 70 whereby unique images 28 which are to be applied to packaged goods 12 may be communicated to a packaging or production facility. Dependent upon the needs of the customer, the packaged goods 12 may be relatively rapidly delivered to a special event e.g. a wedding (see Figure 1) prior to arrival of guests. Other unique packaged goods 12 may be produced by a manufacturing or production facility using unique images which have been sourced from customers remotely thereby uniquely to customize the packaged goods 12 with a unique image selected by the customer.

CLAIMS:

1. A method of customizing packaged goods with a unique image, the method including

obtaining at a remote location the unique image in a digital form;

communicating the image to a packaging facility; and

applying the image to the goods thereby to customize the goods with the unique image.

2. A method as claimed in Claim 1, in which the image is communicated in a wireless fashion to enhance the speed at which the image is communicated from the remote location to the packing facility.

3. A method as claimed in Claim 2, which includes obtaining the image using a digital camera.

4. A method as claimed in Claim 3, which includes transferring the digital form of the image from the digital camera to a cellular telephone and communicating the image via a cellular communications network to the packaging facility.

5. A method as claimed in Claim 4, which includes editing the digital image prior to the application thereof to the goods.

6. A method as claimed in any one of the preceding claims, which includes applying the image to a plurality of labels and thereafter applying the labels to packaged goods.

7. A method as claimed in any one of the preceding claimed 1 to 5 inclusive, which includes applying the image to packaging for receiving goods and thereafter packaging the goods.

8. A method as claimed in any one of the preceding claims, in which the digital image is captured at a preselected event and the goods are provided at the event prior to the termination of the event.

9. A method as claimed in Claim 8, in which the event is a marriage and the image captured is that of a bride and bridegroom.

10. A method as claimed in Claim 8, in which the event is a sporting event.

11. A method as claimed in any one of the preceding claims, which includes communicating the image to the packaging facility via the Internet.

12. A method as claimed in Claim 11, which includes providing an Internet web site with a graphics facility thereby to enable a user to create the image and communicate the image to the packaging facility.

13. A system for customizing packaged goods with a unique image, the system including

image capturing means for capturing the unique image in a digital form;

application means for applying the image to packaging for goods at a packaging facility remote from the image capturing means; and

communication means for communicating the image to the application means.

14. A system as claimed in Claim 13, in which the image capturing means is a digital camera.

15. A system as claimed in Claim 14, in which the communication means is a cellular communications network and the system includes a cellular telephone which communicates the digital image from the digital camera to the packaging facility.

16. A system as claimed in any one of the preceding claims 13 to 15 inclusive, in which the application means is operable to apply the image directly to the packaging after the goods have been packaged.

17. A system as claimed in any one of the preceding claims 13 to 16 inclusive, in which the application means is a printer operable to apply the image to a label which is applied to the goods with a chemical adhesive.

18. A system as claimed in any one of the preceding claims 13 to 17 inclusive, which includes a personal computer with a digital image editing package for digitally manipulating the image prior to application thereof to the goods.

19. A system as claimed in any one of the preceding claims 13 to 18, in which the goods are confectionery items.

20. A new system, substantially as described and illustrated herein.

21. A new method of customizing packaged goods with a unique image, substantially as described and illustrated herein.

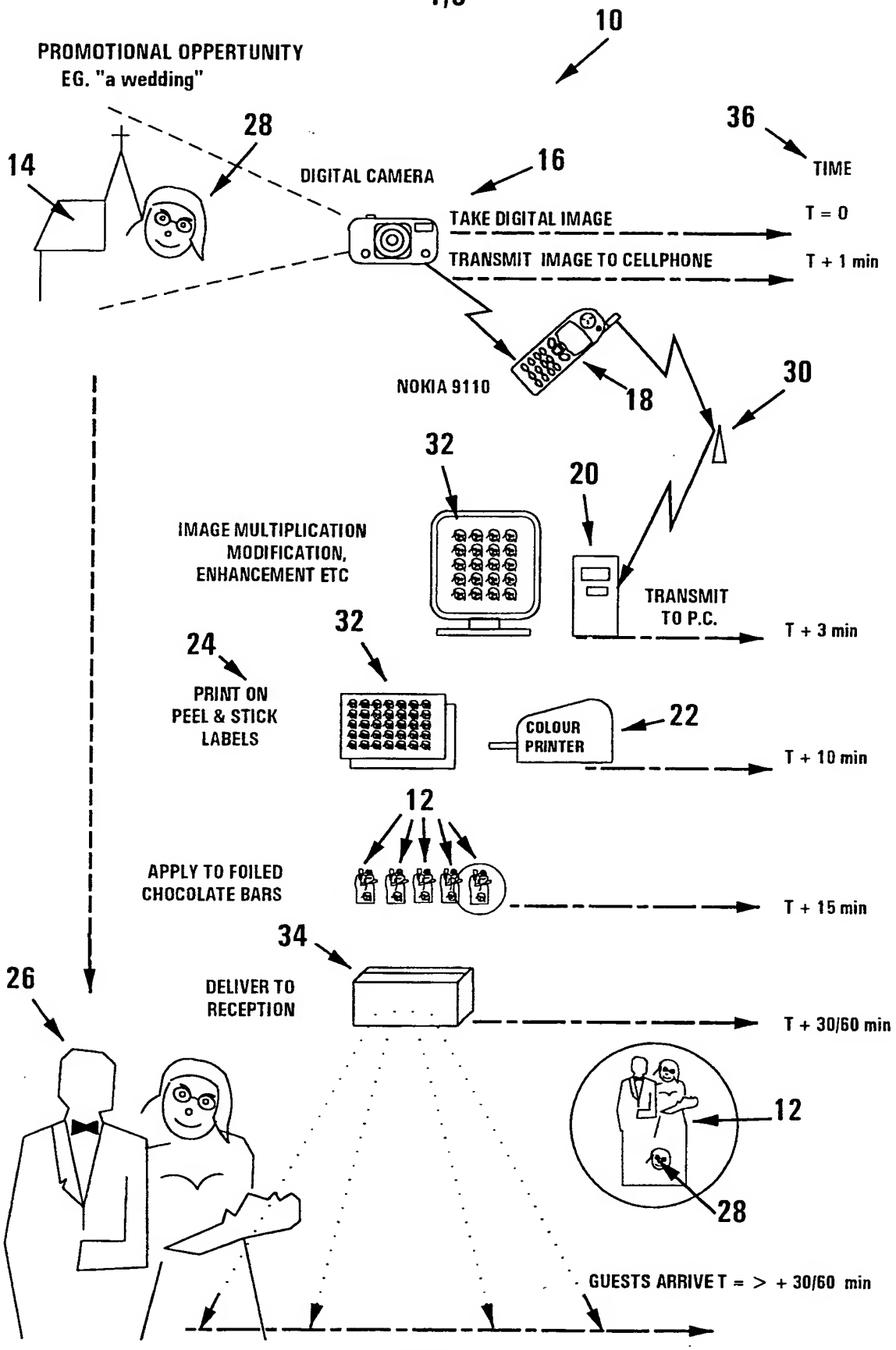

10
PROMOTIONAL OPPERTUNITY
EG. "a wedding"
28
14
DIGITAL CAMERA
16
36
TIME
TAKE DIGITAL IMAGE
T = 0
TRANSMIT IMAGE TO CELLPHONE
T + 1 min
NOKIA 9110
18
30
32
20
IMAGE MULTIPLICATION
MODIFICATION,
ENHANCEMENT ETC
TRANSMIT
TO P.C.
T + 3 min
32
24
PRINT ON
PEEL & STICK
LABELS
COLOUR
PRINTER
22
T + 10 min
12
APPLY TO FOILED
CHOCOLATE BARS
T + 15 min
34
26
DELIVER TO
RECEPTION
T + 30/60 min
12
28
GUESTS ARRIVE T = > + 30/60 min

FIG 1

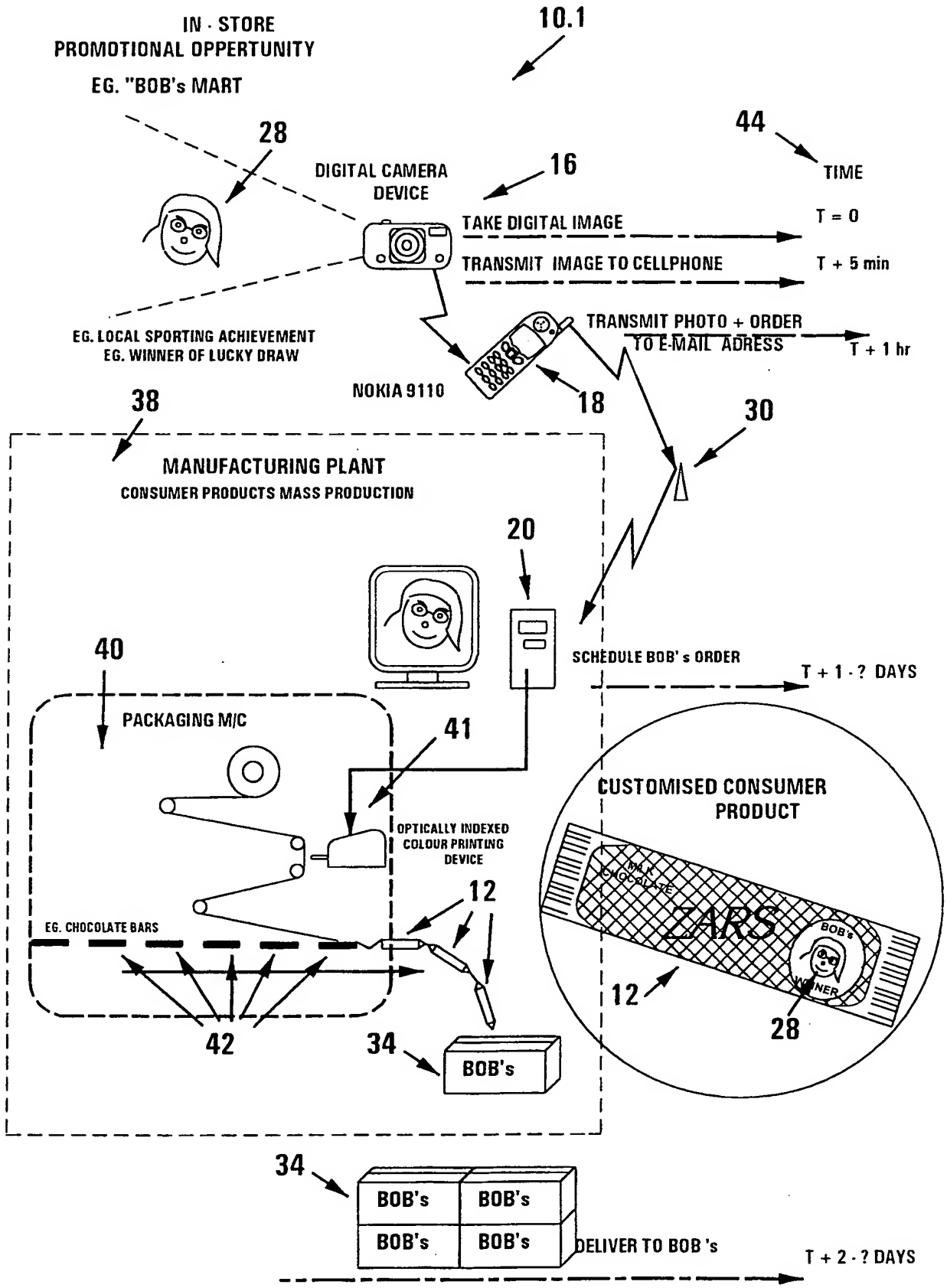

10.1
IN - STORE
PROMOTIONAL OPPERTUNITY
EG. "BOB's MART
28
DIGITAL CAMERA
DEVICE
16
44
TIME
TAKE DIGITAL IMAGE
T = 0
TRANSMIT IMAGE TO CELLPHONE
T + 5 min
EG. LOCAL SPORTING ACHIEVEMENT
EG. WINNER OF LUCKY DRAW
TRANSMIT PHOTO + ORDER
TO E-MAIL ADRESS
T + 1 hr
NOKIA 9110
18
38
30
MANUFACTURING PLANT
CONSUMER PRODUCTS MASS PRODUCTION
20
40
SCHEDULE BOB' s ORDER
T + 1 - ? DAYS
PACKAGING M/C
41
CUSTOMISED CONSUMER
PRODUCT
OPTICALLY INDEXED
COLOUR PRINTING
DEVICE
12
EG. CHOCOLATE BARS
42
34
BOB's
12
28
34
BOB's
BOB's
BOB's
BOB's
DELIVER TO BOB 's
T + 2 - ? DAYS

FIG 2

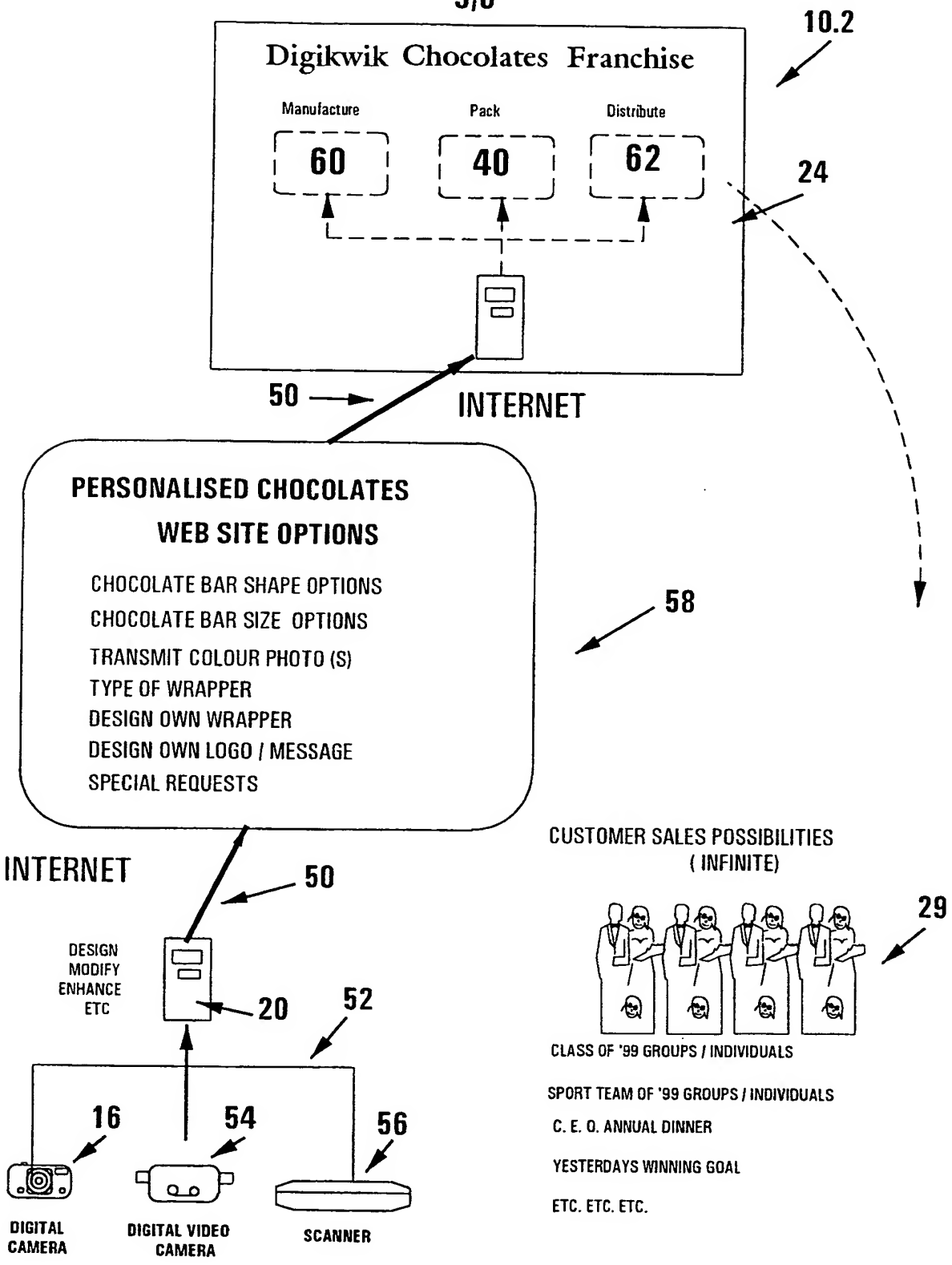
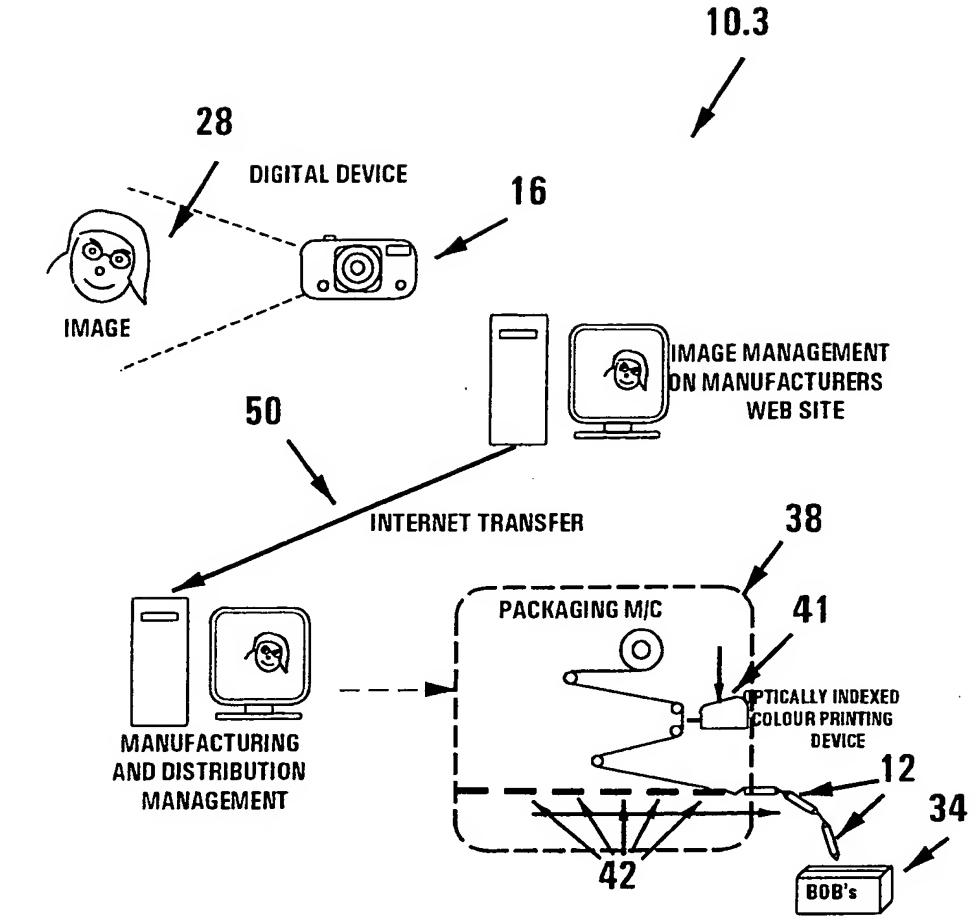

Digikwik Chocolates Franchise
10.2
Manufacture
Pack
Distribute
60
40
62
24
50
INTERNET
PERSONALISED CHOCOLATES
WEB SITE OPTIONS
CHOCOLATE BAR SHAPE OPTIONS
CHOCOLATE BAR SIZE OPTIONS
TRANSMIT COLOUR PHOTO (S)
TYPE OF WRAPPER
DESIGN OWN WRAPPER
DESIGN OWN LOGO / MESSAGE
SPECIAL REQUESTS
58
CUSTOMER SALES POSSIBILITIES
(INFINITE)
29
CLASS OF '99 GROUPS / INDIVIDUALS
SPORT TEAM OF '99 GROUPS / INDIVIDUALS
C. E. O. ANNUAL DINNER
YESTERDAYS WINNING GOAL
ETC. ETC. ETC.
INTERNET
50
DESIGN
MODIFY
ENHANCE
ETC
20
52
16
54
56
DIGITAL CAMERA
DIGITAL VIDEO CAMERA
SCANNER

FIG 3



CUSTOMISED CONSUMER PRODUCT FOR LOCAL "INSTORE" PROMOTIONAL ACTIVITY

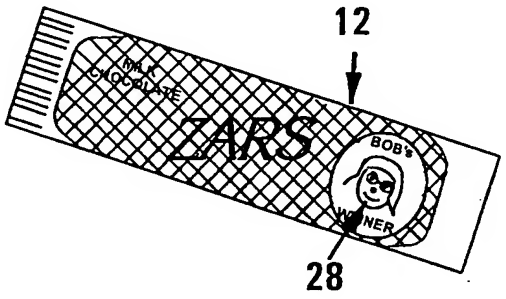


FIG 4

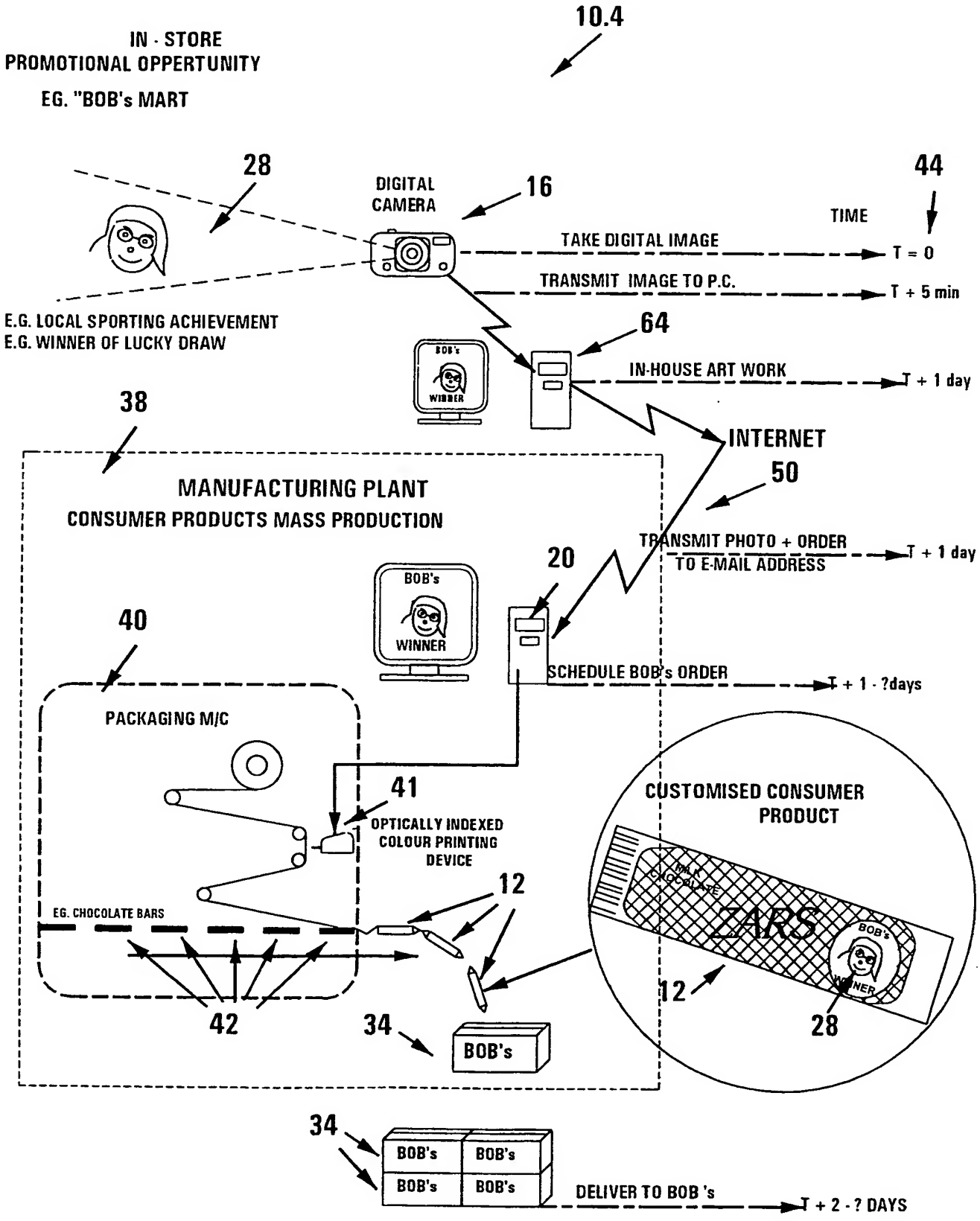

10.4
IN - STORE
PROMOTIONAL OPPERTUNITY
EG. "BOB's MART
28
DIGITAL
CAMERA
16
44
TIME
TAKE DIGITAL IMAGE
T = 0
TRANSMIT IMAGE TO P.C.
T + 5 min
E.G. LOCAL SPORTING ACHIEVEMENT
E.G. WINNER OF LUCKY DRAW
64
IN-HOUSE ART WORK
T + 1 day
38
INTERNET
50
MANUFACTURING PLANT
CONSUMER PRODUCTS MASS PRODUCTION
TRANSMIT PHOTO + ORDER
TO E-MAIL ADDRESS
T + 1 day
20
BOB's
WINNER
40
SCHEDULE BOB's ORDER
T + 1 - ?days
PACKAGING M/C
41
OPTICALLY INDEXED
COLOUR PRINTING
DEVICE
CUSTOMISED CONSUMER
PRODUCT
12
EG. CHOCOLATE BARS
42
34
BOB's
12
28
34
BOB's
BOB's
BOB's
BOB's
DELIVER TO BOB 's
T + 2 - ? DAYS

FIG 5

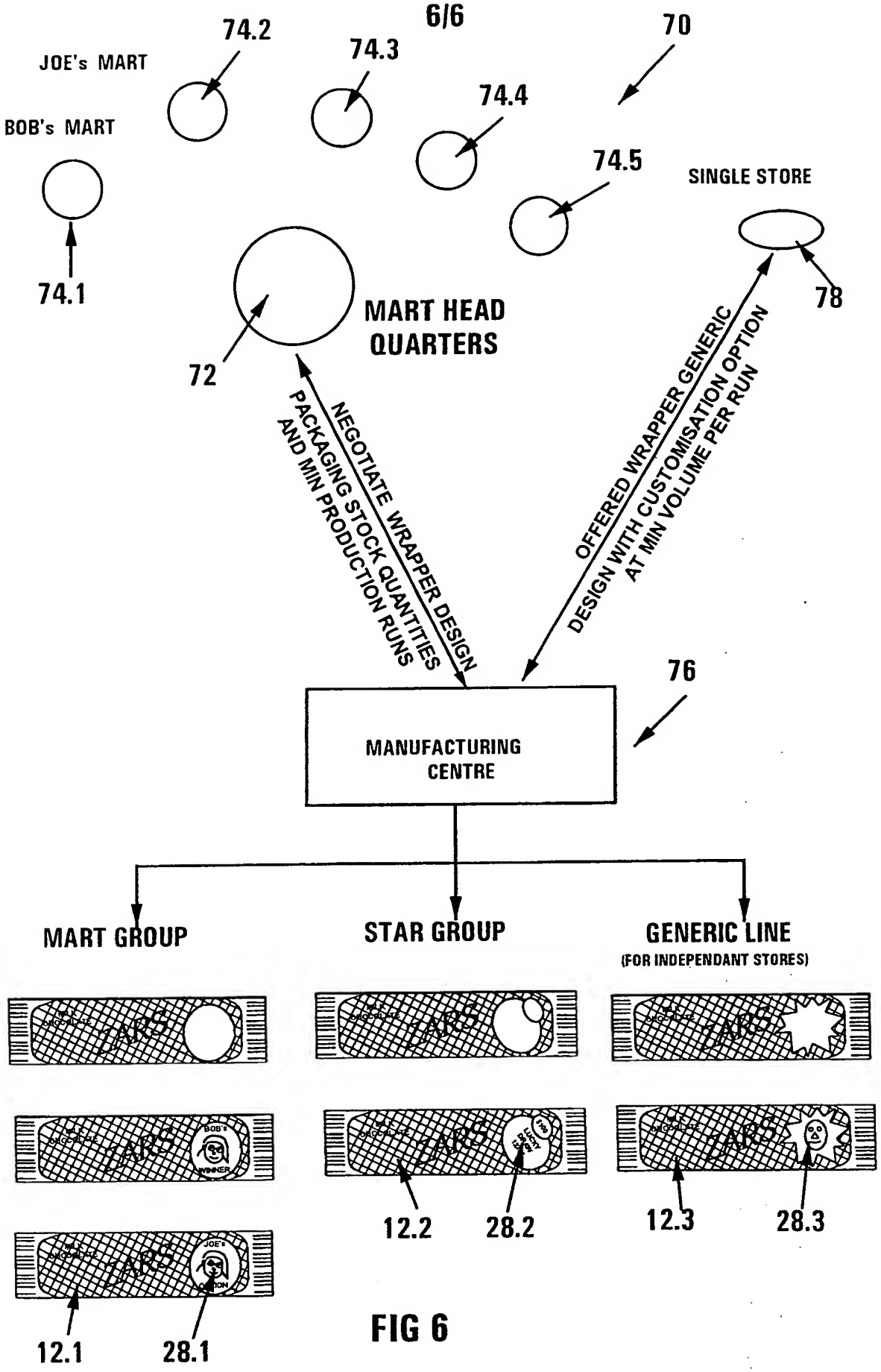

74.2
74.3
70
JOE's MART
74.4
BOB's MART
74.5
SINGLE STORE
74.1
78
72
MART HEAD QUARTERS
NEGOTIATE WRAPPER DESIGN PACKAGING STOCK QUANTITIES AND MIN PRODUCTION RUNS
OFFERED WRAPPER GENERIC DESIGN WITH CUSTOMISATION OPTION AT MIN VOLUME PER RUN
76
MANUFACTURING CENTRE
MART GROUP
STAR GROUP
GENERIC LINE
(FOR INDEPENDANT STORES)
12.2
28.2
12.3
28.3
12.1
28.1

FIG 6

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization
International Bureau

(43) International Publication Date
12 April 2001 (12.04.2001)

PCT

(10) International Publication Number
WO 01/25094 A3

(51) International Patent Classification[7]: H04N 1/00, 1/40

(21) International Application Number: PCT/IB00/01406

(22) International Filing Date: 3 October 2000 (03.10.2000)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
99/6290 4 October 1999 (04.10.1999) ZA

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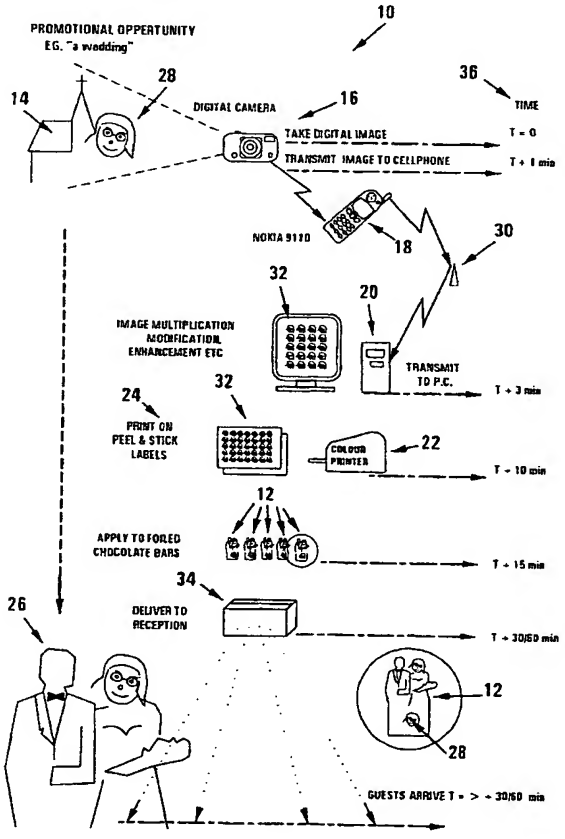
(81) Designated States *(national)*: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW.

(84) Designated States *(regional)*: ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).

Published:
— *with international search report*

[Continued on next page]

(54) Title: A METHOD AND SYSTEM FOR CUSTOMIZING PACKAGED GOODS OVER A COMMUNICATION NETWORK



(57) Abstract: A method of customizing packaged goods (12) with a unique image (28). The method includes obtaining at a remote location the unique image (28) in a digital form, for example a digital camera (16). The image (28) is transmitted to a packaging facility (38), and applying the image (28) to the goods (12) thereby to customize the goods with the unique image. Preferably, the image (28) is communicated in a wireless fashion to enhance the speed at which the image (28) is communicated from the remote location to the packing facility (38).

WO 01/25094 A3

(88) **Date of publication of the international search report:**
27 December 2001

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

INTERNATIONAL SEARCH REPORT

International application No.
PCT/IB00/01406

A. CLASSIFICATION OF SUBJECT MATTER

IPC(7) :H04N 1/00, 1/40
US CL : 358/401, 462

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

U.S. : 358/401, 462

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

358/450, 402, 400, 443, 448, 471; 382/317, 188, 186, 189, 190; 379/100.01

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X _ Y	US 5,710,641 A (LOWRY et al) 20 January 1998; Figs. 8-11; col. 2, lines 20-65; col. 6, lines 55-65 and col. 7, lines 5-15	1-3, 5-8, 13, 14, 16-18, 20 --- 21/4, 9-12, 15, 19
Y	US 5,907, 598 A (MANDALIA et al.) 25 May 1999, Abstract col. 2, lines 13-30; col. 3, lines 37-55; col. 4 lines 36-50; col. 5, lines 29-35; col. 6, lines 1-5 and 27-36.	21/4, 9-12, 15, 19

☐ Further documents are listed in the continuation of Box C. ☐ See patent family annex.

*	Special categories of cited documents:	"T"	later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
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"O"	document referring to an oral disclosure, use, exhibition or other means		
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Date of the actual completion of the international search 28 APRIL 2001	Date of mailing of the international search report 26 JUL 2001
Name and mailing address of the ISA/US Commissioner of Patents and Trademarks Box PCT Washington, D.C. 20231 Facsimile No. (703) 305-3230	Authorized officer JEROME GRANT II Telephone No. (703) 305-4391

Form PCT/ISA/210 (second sheet) (July 1998)*